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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,903	06/16/2005	Klaus Schoeller	DE020319	6540
24737 75	90 09/19/2006		EXAMINER	
	ELLECTUAL PROPER	WALFORD,	WALFORD, NATALIE K	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF	MANOR, NY 10510		ARTONII	TATER NOWIDER
			2879	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)			
		10/539,903	SCHOELLER ET AL.			
		Examiner	Art Unit			
		Natalie K. Walford	2879			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exten after: - If NO - Failur Any r	DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DATE is signs of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing ind patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)[🛛	Responsive to communication(s) filed on 16 Ju	<u>ine 2005</u> .				
,	This action is FINAL. 2b)⊠ This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-13 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 16 June 2005 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction to the other contents.	☑ accepted or b)☐ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 4/06, 6/06.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

#### **DETAILED ACTION**

### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Claim Objections

Claims 5-7 and 9-11 are objected to because of the following informalities:

Claim 5 recites the limitation "the wavelength range" in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the wavelength range" in the second line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the layer thickness" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "silicium nitride." The Examiner will read this to be "silicon nitride."

Claim 10 recites the limitation "the layer thickness" in the second line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the average diameter" in the third line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 12 recites the broad recitation of the inorganic pigment is composed of a material or oxide from a group, and the claim also recites

"in particular" another group of materials, which is the narrower statement of the range/limitation.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Boonekamp et al. (WO 01/24224).

Regarding claim 1, Boonekamp discloses a high-pressure discharge lamp (item 14) in figure 1B comprising at least one burner (item 12) having a discharge space, two electrodes (page 7, lines 27-31) extending in the discharge space, a gas filling in the discharge space that contains at least an inert gas and a metal halide mixture (page 7, lines 27-31), and comprising a tubular outer bulb (item 11) having two ends, the burner being attached, at least at one end, to the outer bulb, characterized in that the outer bulb comprises at least one light-absorbing means (item 16) and at least one interference filter (item 15), and an interference filter is arranged on or in at least a part of the burner (see FIG. 1B).

Regarding claim 2, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the interference filter is arranged on the outer surface of the burner (FIG. 1B).

Regarding claim 3, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that a light-absorbing means is provided on the inner surface of the outer bulb (FIG. 1B, end of item 16 dotted line), and a light-absorbing means (item 16) is provided between the outer surface of the outer bulb and the interference filter (FIG. 1B).

Regarding claim 4, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that at least at the surfaces of the areas that are used to attach the burner to the outer bulb, no light-absorbing means and/or interference filters are arranged (FIG. 1B, area at top and bottom of item 13).

Regarding claim 8, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the interference filter is composed of a plurality of layers, the layer structure being such that a layer having a higher refractive index alternates with a layer having a lower refractive index, the layer having the lower refractive index preferably consisting predominantly of SiO<sub>2</sub> and the second layer being composed of a material having a higher refractive index than SiO<sub>2</sub> (page 7, lines 5-15).

Regarding claim 9, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 8, characterized in that the second layer is composed of a material selected from the group consisting of titanium oxide, tantalum oxide, niobium oxide, hafnium oxide, silicon nitride, very preferably zirconium oxide ZrO<sub>2</sub>, or a mixture of said materials (page 10, lines 1-7).

Regarding claim 10, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the layer thickness of the light-absorbing means ranges between 5 nm and 10,000 nm (page 9, lines 18-25).

Regarding claim 13, Boonekamp discloses a light system for motorcars comprising at least a high-pressure discharge lamp as claimed in claims 1 through 12 (page 9, lines 18-25).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boonekamp et al. (WO 01/24224).

Regarding claim 7, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, but does not expressly disclose that in that the layer thickness of the interference filters ranges between 800 and 2800 nm, as claimed by Applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the layer thickness of the interference filters range between 800 and 2800 nm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Regarding claim 11, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the light-absorbing means contains inorganic pigments, which absorb part of the visible light (page 6, lines 9-16 and 26-33), but does not expressly disclose that the average diameter of the inorganic pigments is below 100 nm, as claimed by Applicant. Boonekamp does disclose that that light-absorbing means layer is between 50 and 1000 nm

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thick. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the average diameter of the inorganic pigments below 100 nm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Regarding claim 12, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 11, characterized in that the inorganic pigment is composed of a material or an oxide selected from a group consisting of iron oxide, zinc-iron-oxide (Zn-Fe<sub>2</sub>O<sub>4</sub> or ZnO-Zn-Fe<sub>2</sub>O<sub>4</sub>), phosphor-doped iron oxide, zinc-iron-chromium, bismuth-vanadate, in particular pucherite bismuth-vanadate, vanadium oxide, zirconium-praseodymium-silicate, titanium-antimony-chromium, nickel-antimony-titanium and silver, or the mixtures thereof (page 6, lines 26-33).

# Claim Rejections - 35 USC § 102/103

Claims 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Boonekamp et al. (WO 01/24224) and alternatively under 35 U.S.C. 103(a) as being unpatentable over Boonekamp et al. (WO 01/24224).

Regarding claim 5, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the light transmittance of the interference filter and of the interference filter, with regard to the wavelength range of 600 to 800 nm, is >90% for both (page 6, lines 9-16). The Examiner notes that Boonekamp has met Applicant's structural limitations and transmits in the same wavelength range as claimed by Applicant. Hence, it is inherent that the light transmittance be greater than 90%.

Regarding claim 5, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, but does not expressly disclose that in that the light transmittance of the interference filter and of the interference filter, with regard to the wavelength range of 600 to 800 nm, is >90% for both, as claimed by Applicant. Boonekamp does disclose that though that the lamp transmits in the wavelength range between 570 and 620 nm (page 6, lines 9-16). Therefore, it would be understood to one with ordinary skill in the art that the lamp would transmit light greater than 90%, since Boonekamp's lamp transmits in the same wavelength range as Applicant's.

Regarding claim 6, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, characterized in that the light transmittance of the light-absorbing means with regard to the wavelength range of 600 to 800 nm ranges between 70 and substantially 100% (page 6, lines 9-16). The Examiner notes that Boonekamp has met Applicant's structural limitations and transmits in the same wavelength range as claimed by Applicant. Hence, it is inherent that the light transmittance be greater than 90%.

Regarding claim 6, Boonekamp discloses a high-pressure discharge lamp as claimed in claim 1, but does not expressly disclose that in that the light transmittance of the light-absorbing means with regard to the wavelength range of 600 to 800 nm ranges between 70 and substantially 100%, as claimed by Applicant. Boonekamp does disclose that though that the lamp transmits in the wavelength range between 570 and 620 nm (page 6, lines 9-16). Therefore, it would be understood to one with ordinary skill in the art that the lamp would transmit light between 70 and 100%, since Boonekamp's lamp transmits in the same wavelength range as Applicant's.

#### Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kiryu et al. (US 6,429,577) is cited to show a discharge lamp. Bohmer et al. (US 6,819,049) is cited to show an electric lamp.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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